Attny Docket: 10970672-1

CLAIMS

- 1 1. A battery compartment configured such that opposing polarity terminals of adjacent
- batteries contact each other, wherein the batteries are arranged such that a region of one
- 3 of the terminals that defines a minimum accessible portion of the terminal surface area is
- 4 the only point of contact between the two contacting terminals.
- 1 2. The battery compartment of claim 1, wherein the batteries comprise first and second
- 2 dry cell batteries and said minimum accessible portion of the terminal surface area is an
- 3 edge of a positive terminal button of said first battery.
- 1 3. The battery compartment of claim 1, wherein the batteries comprise first and second
- 2 miniature batteries, and said minimum accessible portion of the terminal surface area is
- an edge of a positive terminal casing of said first battery.
- 1 4. The battery compartment of claim 2, wherein the first and second batteries each have
- 2 a casing with positive and negative terminal surfaces on opposing ends of the batteries,
- 3 said casings defining a longitudinal battery axis substantially orthogonal to each terminal
- 4 surface, wherein when installed, the longitudinal axes of the first and second batteries lie
- 5 in a same plane and intersect each other.
- 1 5. The battery compartment of claim 3, wherein the first and second batteries each have
- 2 a casing with positive and negative terminal surfaces on opposing ends of the batteries,
- 3 said casings defining a longitudinal battery axis substantially orthogonal to each terminal
- 4 surface, wherein when installed, the longitudinal axes of the first and second batteries lie
- 5 in a same plane and intersect each other.
- 1 6. The battery compartment of claim 1, wherein the battery compartment is constructed
- and arranged to cause said region of said minimally accessible surface area of one of the

- 3 adjacent batteries to forcibly scrape against said negative terminal of the other one of the
- 4 adjacent batteries.
- 7. A battery compartment for at least two batteries each having a casing with positive
- and negative terminal surfaces on opposing ends thereof, said casing of each said battery
- being transected by a longitudinal battery axis substantially orthogonal to said positive
- 4 and negative terminal surfaces, wherein the installed batteries are serially aligned in
- 5 terminal contact with each other such that their respective longitudinal axes intersect each
- 6 other.
- 1 8. The battery compartment of claim 7, wherein the at least two batteries includes a first
- and a second battery, wherein said positive terminal of said first battery is in contact with
- a negative terminal surface of said second battery, wherein said negative terminal surface
- of said second battery is not parallel with said positive terminal surface of said first
- 5 battery when said first and second batteries are installed in the battery compartment.
- 9. The battery compartment of claim 7, wherein said batteries are dry cell batteries.
- 1 10. The battery compartment of claim 9, wherein said positive terminal surface of said
- 2 first battery is in the form of a button protruding from said casing, said button having a
- substantially planar top surface with a edge around the periphery thereof, and wherein
- 4 said region of said positive terminal surface is said edge of said positive terminal button.
- 1 11. The battery compartment of claim 7, wherein said batteries are miniature batteries.
- 1 12. The battery compartment of claim 11, wherein said positive terminal surface includes
- 2 a casing of said miniature batteries, wherein said region of said positive terminal is an
- 3 edge of said casing.

- 1 13. The battery compartment of claim 8, wherein the battery compartment is constructed
- and arranged to cause said region of said positive terminal to forcibly scrape against said
- 3 negative terminal of said second battery.
- 1 14. The battery compartment of claim 9, further comprising:
- 2 positive and negative device contacts installed in opposing ends of the battery
- 3 compartment to contact a positive terminal of a battery last in the series of one of the at
- 4 least two installed batteries and a negative terminal of a battery first in the series of one of
- the at least two installed batteries.
- 1 15. The battery compartment of claim 14, wherein said device contacts comprise a tab
- 2 negative contact having an orthogonal surface vector that intersects said longitudinal axis
- of one of the at least two installed batteries.
 - 16. A battery-powered device comprising:
- a power consuming component; and
- a battery compartment for electrically connecting at least two standard dry cell
- 4 batteries in a serially aligned arrangement, each said dry cell battery including a casing
- with a substantially planar negative terminal surface and a raised positive terminal button
- 6 with a planar top surface and edges around the periphery thereof, wherein only said
- 7 positive terminal button edge of a battery in a second series battery position contacts said
- substantially planar surface of a negative terminal of a battery in a first series battery
- 9 position.

1

- 1 17. The battery-powered device of claim 16, wherein a longitudinal axis of said second
- 2 battery intersects a longitudinal axis of said first battery.
- 1 18. The battery-powered device of claim 17, wherein the battery compartment is
- 2 constructed and arranged to cause said positive terminal edge of said battery in said

- 3 second series battery position to forcibly scrape against said negative terminal of said
- 4 battery in said first series battery position as said batteries are installed into the battery
- 5 compartment.
- 1 19. The battery-powered device of claim 18, wherein said battery compartment further comprises:
- a positive device contact secured in said battery compartment so as to contact said
- 4 negative contact of said battery in said second series battery position, and
- a negative device contact secured in said battery compartment so as to contact said
- 6 positive contact of said battery in said first series battery position.
- 1 20. The battery-powered device of claim 19, wherein said negative device contact is a tab
- 2 contact having an orthogonal surface vector that intersects said longitudinal axis of said
- 3 battery installed in said first series battery position.